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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,783	05/14/2001	Kristen Lynne McKenzie	7341	9667

27752 7590 02/05/2004

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EXAMINER

COLE, LAURA C

ART UNIT PAPER NUMBER

1744

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/831,783

Applicant(s)

MCKENZIE ET AL.

Examiner

Laura C Cole

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 08212003 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 53, 54, 57, and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of these claims recite in Line 1 a product comprising "instructions for using" and then includes method of use "steps" which is unclear as these claims are dependent on an apparatus claim. See MPEP 2173.05(p) II. A single claim which claims both an apparatus and the method steps of using the apparatus is indefinite under 35 U.S.C. 112, second paragraph. Ex parte Lyell, 17 USPQ2d 1548 (Bd. Pat. App. & Inter. 1990).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 59-60 are rejected under 35 U.S.C. 102(b) as being anticipated by FR 1 102 562 (herein referred to as '562).

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'562 displays an ultrasonic cleaning device comprising a housing, gripping means, retaining means for removably retaining tableware, a transducer means mounted in housing for oscillating at an ultrasonic frequency, and power supply means for supplying current to the transducer, and that the housing can be at least partially immersed in an aqueous environment (See English Explanation provided in the IDS of 23 January 2003, Figures 1 and 2 the housing is represented at (3), a retaining means for retaining the tableware (tableware shown as (6)), a transducer means (wherein a transducer is defined as "a device that converts input energy of one form to an output energy of a different form" (The American Heritage® Dictionary of the English Language, Fourth Edition, Copyright © 2000 by Houghton Mifflin Company)) is mentioned as the vibrator relies upon or is *interdependent* of the electromagnetic body (see Exhibit A which is a translation of Column 2 Lines 16-18) so therefore the energy must be converted or transduced, a power supply means (electromagnetically), and that the housing can be immersed in an aqueous environment (as shown in Figures 1-2.)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 33-35, 39, and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sharp, USPN 5,297,512.

Sharp discloses a vibrating and ultrasonic sound emitting grooming device that comprises a housing (Figure 1), a gripping means (Figure 1 (19)), a cleaning head (Figure 1) that is adapted to be removably mounted to the housing (Column 2 Lines 35-41), a transducer means mounted in the housing for oscillating (Figure 1 (40)), and a power supply means which is mounted in the housing (Figure 1 (46)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The cleaning head is in the form of bristles (Figure 1 (28)). The transducer means has a frequency of 30 KHz (Column 3 Line 9). Sharp does not disclose having a cleaning head surface area greater than 6.25 cm<sup>2</sup>, however Figure 1 indicates a finger defining a scale for the size of the device indicating that the area is greater than 6.25 cm<sup>2</sup>.

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It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a cleaning a pet's coat to have a cleaning head surface area greater than 6.25 cm<sup>2</sup> because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area.

4. Claims 33-35, 39, 42-44, 47, 49, 51, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center, USPN 5,311,632.

Center discloses an ultrasonic plaque removal device that comprises a housing (Figure 1 (22)), a gripping means (Figure 1 (12)), a cleaning head (Figure 2 (26)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Lines 57-60), a transducer means mounted in the housing for oscillating (Figure 2 (48); Column 3 Lines 61-67), and a power supply means which is mounted in the housing (Figure 2 (20)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The cleaning head is in the form of bristles (Figure 2 (26)). The device is adapted to function while partially immersed in an aqueous environment (Column 4 Lines 3-15). There is first and second housings, with the second housing comprises a transducer (Figure 2, the portion on the left split from (18)) and the first portion (Figure 2 (18)) that contains the power supply means. The device is used in a method that contacts a soil with a cleaning composition and then contacting the soil with the cleaning head of the device by imparting ultrasonic energy (Column 4 Lines 3-7). The cleaning composition that is disclosed is a plaque softener or

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tooth polishing liquid or gel (Column 4 Lines 3-7.) Center does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$ .

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$ . Applicant has not disclosed that having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth.

5. Claims 33-35, 36, 38-39, 41-51, and 55 are rejected under 35 U.S.C. 103(a) as obvious over Sawyer, USPN 3,357,033.

Sawyer discloses a sonic surface cleaner that comprises a housing (Figures 1-3), a gripping means (Figure 1 (12)), a cleaning head (Figures 1-3 (30)) that is adapted to be removably mounted to the housing (Column 2 Lines 52-57), a transducer means mounted in the housing for oscillating (Column 4 Lines 17-22 disclose that the energy generated is "transformed" into sound waves and releases that energy at the surface as sonic Column 4 Lines 22-36), and a power supply means (from wires (55) and (56) that lead to a cap (60), Column 3 Lines 10-18, and by Figure 1 appear to connect to a cord that would go to an outlet.) The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The device further comprises at least one solution storage means (Figure 1 (72) that contains a cleaning composition for cleaning, and a dispensing means (Figure 1 (71)) mounted in the housing for supplying the

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cleaning composition (Column 3 Lines 22-32). The cleaning head may be a sponge (Figure 3) so that the cleaning liquid is supplied to a surface that is coterminous (Figure 2) with the head in that the absorbent sponge portions disperse the liquid. The "second" housing is the housing labeled (11) in Figures 1-3 wherein the "first" housing is the liquid supply (Figure 1 (72)). Sawyer also discloses a method for removing soil from a hard surface that contacts the soil with a liquid and cleaning head and imparting ultrasonic energy to it (Column 4 Line 73 to Column 5 Line 18 states that a cleaning composition or detergent is put into contact with a soil, then loosening the soil, and then rinsing the amount with water.) Sawyer does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  or having a power output of at least  $0.02 \text{ watts/cm}^3$ . Further Sawyer does not include an ultrasonic device, however describes the cleaning movement analogous to cleaning by ultrasonic wave energy (Column 4 Lines 69-72).

It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a floor to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$  or having a power output of at least  $0.02 \text{ watts/cm}^3$  because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area. Further, it would have been obvious for one of ordinary skill in the art to substitute the sonic transmission of the device for an ultrasonic one since they both have the same cleaning effect on an object.



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6. Claims 33-37, 39, 42-49, 51, 52, 55, and 56 are rejected under 35 U.S.C. 103(a) as obvious over Hoffman, USPN 5,890,249 in view of Center, USPN 5,311,632.

Hoffman discloses a multi-purpose vibration cleaning device that comprises a housing (Figures 1-5), a gripping means (Figure 1 (12)), a cleaning head (Figures 1-3 (26) or (24)) that is adapted to be removably mounted to the housing (Column 2 Lines 56-57), a transducer means mounted in the housing for oscillating (Column 2 Lines 9-11 disclose that the power supply is connected to the vibration generator, and through that the type of energy must be converted or "transduced" from the battery to the output vibrations), and a power supply means which is mounted in the housing (Figure 1 (17)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figure 1). The device further comprises a solution storage means for containing a cleaning composition and a dispensing means (Column 2 Lines 56-63.) The cleaning composition is lye (Column 2 Line 59) wherein lye is a process aid, antibacterial agent, a surfactant, "perfume", anti-microbial agent, etc. The cleaning head may take the form of a brush, cloth, or towel (Column 2 Lines 45-55, Column 3 Lines 10-19) and can be at least partially immersed in an aqueous environment (Column 2 Lines 12-13). The "second" housing is the housing mentioned above wherein the "first" housing is the housing for the removable cleaning head. Hoffman does not disclose having a cleaning head surface area greater than 6.25 cm<sup>2</sup> or that the vibration is ultrasonic.

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Center discloses all elements above, including the teaching that ultrasonic cleaning is a known and beneficial means for cleaning objects (Column 1 Lines 16-29).

It would have been obvious to one of ordinary skill in the art to construct a cleaning head for a sonic surface cleaner that is used for a cleaning an oven, polishing furniture, cleaning a bathroom (Column 3 Lines 19-29) to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$  because it would be desirable to have a larger cleaning surface area to reduce the time it takes to clean an area, to reduce the human effort in cleaning a large surface, and because it is most efficient for cleaning a large area. Further, it would have been obvious for one of ordinary skill in the art to modify Hoffman by using ultrasonic means rather than vibration for cleaning objects.

7. Claims 33-35, 39, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock, USPN 5,369,831 (herein '831).

'831 discloses a therapeutic ultrasonic toothbrush that comprises a housing (Figure 1), a gripping means (Figure 1 (22)), a cleaning head (Figures 1-3 (32)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Line 6), a transducer means mounted in the housing for oscillating (Figure 1 (28); Column 3 Lines 10-18), and a power supply means which is mounted in the housing (Figure 1 (24)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The cleaning head is in the form of bristles (Figures 1-3 (34)). The device is adapted to function while at least partially immersed in an aqueous environment since it is in the form of a

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toothbrush and is used in the oral cavity (Column 5 Lines 59-64). There is a first and second housings, with the transducer means in the second housing, the second housing being more towards the distal end, and the power supply means in its own housing towards the proximal end. '831 does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$ .

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$ . Applicant has not disclosed that having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth.

8. Claims 33-35, 39, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bock, USPN 5,546,624 (herein '624).

'624 discloses a therapeutic ultrasonic toothbrush that comprises a housing (Figure 1), a gripping means (Figure 1 (22)), a cleaning head (Figures 1-3 (32)) that is adapted to be removably mounted to the housing (Figure 2; Column 3 Line 6), a transducer means mounted in the housing for oscillating (Figure 1 (28); Column 3 Lines 10-18), and a power supply means which is mounted in the housing (Figure 1 (24)). The gripping means is at a proximal end while the cleaning head is at a distal end (Figures 1-3). The cleaning head is in the form of bristles (Figures 1-3 (34)). The device is adapted to function while at least partially immersed in an aqueous environment since it is in the form of a

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toothbrush and is used in the oral cavity (Column 5 Lines 59-64). There is a first and second housings, with the transducer means in the second housing, the second housing being more towards the distal end, and the power supply means in its own housing towards the proximal end. '624 does not disclose having a cleaning head surface area greater than  $6.25 \text{ cm}^2$ .

It would have been obvious to one of ordinary skill in the art to have a cleaning head surface area greater than  $6.25 \text{ cm}^2$ . Applicant has not disclosed that having a cleaning head surface area greater than  $6.25 \text{ cm}^2$  provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with cleaning soiled food off of a surface since it cleans soiled food from teeth.

9. Claims 53, 54, 57, and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Center, USPN 5,311,632.

Center discloses all elements regarding the device as stated above however does not disclose instructions for using the product.

It would have been obvious for one of ordinary skill in the art to provide operating instructions as it well known in marketing and business to provide instructions for use of a product to protect the buyer and user.

#### ***Applicants Arguments***

10. In the response of 29 September 2003, Applicant argues that:

A. None of the references require a cleaning head which rests on a surface having a surface area greater than  $6.25 \text{ cm}^2$ .

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B. FR '562 does not disclose a cleaning head which is adapted to be removable from the housing.

C. Sawyer '033 does not teach an ultrasonic cleaning device.

D. Hoffman '249 does not disclose a device which includes a transducer means capable of oscillating a cleaning head at ultrasonic frequency.

E. Boding '076 does not disclose a cleaning device which operates at an ultrasonic frequency.

### ***Response to Arguments***

11. Applicant's arguments A and B filed 29 September 2003 have been fully considered but they are not persuasive.

A. For the reasons stated above, it is obvious for a cleaning head to have a surface area greater than  $6.25 \text{ cm}^2$ . Further, In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. See MPEP 2144.04 (IV)A.

B. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a cleaning head adapted to be removable mounted to the housing) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not

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read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Further, *In re Dulberg*, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose."). See MPEP 2144.04 (V) C.

12. Applicant's arguments C and D, see Response, filed 29 September 2003, with respect to the rejection(s) of claim(s) 33-35, 36, 38-39, 41-51, and 55 under 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sawyer, and claims 33-37, 39, 42-49, 51, 52, 55, and 56 under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) to Hoffman and have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, new grounds of rejection are made in view of 35 U.S.C. 103(a) to Sawyer and 35 U.S.C. 103(a) to Hoffman in view of Center.

13. Applicant's argument E, see Response, filed 29 September 2003, with respect to Bodine have been fully considered and are persuasive. The rejection has been withdrawn.

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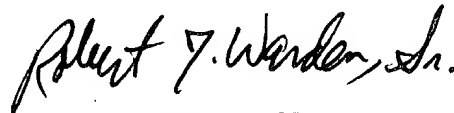
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1300.

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